COMMENTS ON SARRACENIA IDENTIFICATION SHEETS

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Having worked with Sarracenias in some depth for several years, I have been asked to comment on the identification sheets intended as part of a CITES manual and which appeared in the June, 1987 CPN (16:31-36 and back cover). It is my understanding that the drawings were prepared by a contracted artist from herbarium material and that the text was done by members of the Smithsonian Dept. of Botany and TRAFFIC (U.S.A.) and that the manual is intended for identification training and reference by CITES ports of entry inspectors.

I first read the text material in January, 1985 when drafts were sent to me by TRAFFIC (U.S.A.) for review and comment. I first saw the drawings after publication in CPN. My comments at the time in 1985 were somewhat guarded and dubious since I pointed out that quite simply anyone interested in smuggling Appendix listed Sarracenias would simply have to trim all pitchers and flowers and send rhizomes under the name of some non-threatened species, eg *S. alata*. The shipper and receiver would make prearrangements by letter for the code labeling. This may seem somewhat cynical, but that is the way it would be handled. Having reread the text and seen the drawings, I am still quite dubious.

I do indeed support the concept of preserving our endangered flora, although I still tend to believe that the best avenue of approach is to purchase or receive as donations large blocks of appropriate land where the endangered flora grows through some agency (preferably private, such as Nature Conservancy which has made giant strides in this direction) and then managing the property on the advice of experts on the spot, and provide security. As it stands, CITES is already way ahead of the U.S. threatened and endangered species program, and interstate shipment of certain CITES appendixed plants legally within the United States is still permissable. I think that from a practical viewpoint we need to direct precious funds and energies to the realities of preserving such sites, not the forlorn hope that ports of entry inspections will prevent smuggling of those remaining endangered species not on preserved properties.

That having been said, and the likelihood that the CITES plan and manual will proceed on course anyway, here are some observations. The concept of using botanical style drawings rather than photographs is excellent since the artist can emphasize certain characteristics in a drawing that would require several photos to show. Of the three drawings, that of *S. rubra* ssp. *jonesii (S. jonesii)* is the best in relative terms. The tall, narrow pitchers with adaxial bulging near the tops is true. One phyllodium is shown, but the leaf dimorphism should have been included more extensively with typical spring leaves along with the summer. Also, the flower drawing is limited in that the petal shape is far from correct, the petal lobe being nearly circular in all *S. rubra* sspp. (or "complex"). The flattened hood portion means little. The rhizome is also incorrectly directed and shaped. Quite frankly, the pitcher drawings of *S. oreophila* and *S. rubra* ssp. *alabamensis (S. alabamensis* ssp. *alabamensis)* are nearly indistinguishable if viewed unlabeled, except that the phyllodia on *S. oreophila* are more nearly correct. Even here, the phyllodia should be more sickle-shaped (falcate, as in the technical description—The non-technical description lists oreophila's phyllodia as "Sword-shaped," which they are not unless we are referring to a scimitar!). Again, the rhizomes are limited in their depictions. I keep mentioning the rhizomes since this is clearly the only thing most inspectors will see of these plants in ports or entry, and perhaps accurate drawings of the three or so forms of *Sarracenia* rhizomes should be made from good material, particularly if "most" Sarracenias and their natural hybrids do appear on Appendix II. Also

again, in the *alabamensis*, spring leaves (at least a wreath of a few) should be shown. Another "also," the petals of *alabamensis* are incorrectly portrayed, especially in the isolated close-up in the lower left hand corner.

Concerning the text, I am not sure what purpose the somewhat editorial comments serve an inspector regarding straight identification. The inaccuracy of the classic falcate phyllodium in the non-technical portion of one sheet has been mentioned, even though it is correct in the technical part. Concerning *alabamensis*, there are far more than 500 plants in six colonies—I found that many in northern Autauga Co., AL alone last year! Driving up and down roads is not going to lead to locations unless one is familiar with the kind of geography in which the plants are likely to occur in back areas of farms and commerical timber property. Contacting local residents for at least preliminary information may be valuable, but eventually sites must be checked by personal visits or one must see some material in the form of a plant or some leaves. (One lady enthusiastically replied to my queries and led me to a lovely stand of *Hexastylis* sp. which she thought was a "pitcher plant"!). The point is that in my experience careful searching has not expanded the range beyond the three counties known but has disclosed many more sites within these counties, some of rather great extent. One in particular extends along a rim of seeps above a creek for at least 50m. The growth of plants in this location was considerably enhanced by recent timber cutting.

Finally, I must comment on nomenclature. I realize that the CITES Secretariat has decided what names to use for members of the *S. rubra* " complex," probably based on the Case paper preceding mine. However, the concept of *S. rubra* with five subspecies seems to have caught on more in some circles. I invite readers of this article to review the papers concerned and listed below and decide for themselves. I was misquoted by the writers of the sheets—*S. rubra* ssp. *alabamensis* is not interpreted by me as a "shade variant," presuming shade in terms of light. The semispecies comment is correct, and I used the subspecies nomenclature simply because the ICBN makes no provisions for the more useful and fluid evolutionary concept of semispecies. In the end, taxonomy comes down to one's own interpretation of where the point lies for sufficient discontinuity of characters, particularly related to well-accepted species within a genus, to draw the line for species or subspecies. The Cases did a thorough and excellent study with a fine paper at the end, but our interpretations of similar observations along with a few differing observations led us to separate decisions.

REFERENCES:

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